# Transportation Analysis







PREPARED BY
THE MINNESOTA DEPARTMENT OF TRANSPORTATION
PROGRAM MANAGEMENT DIVISION
TRAFFIC AND COMMODITIES SECTION

Minnesota Department of Transportation
Transportation Building, St. Paul, MN 55155

September 30, 1985

Phone 296-0217

David W. Schmidt, P.E.
Planning and Programming
Hennepin County
Department of Transportation
320 Washington Avenue South
Hopkins, Minnesota 55343

Dear Mr. Schmidt:

This report contains information on the forecasting process, a summary of the data and procedures used for this particular route, an inset map of the project area, and year 2010 traffic forecasts on CSAH 1 from Aldrich to 98th Street. The following information for CSAH 1 is supplied in the attached figure:

Average Weekday Traffic (AWDT)
A.M. and P.M. peak hour volumes
Heavy Commercial AWDT (HCAWDT)
Turning movements at the intersection of CSAH 1 and the following crossroads: Aldrich, TH 35W, the entrance to Denny's Restaurant, and 98th Street

Traffic forecasting is based on a regional travel model of the Twin Cities Metropolitan Area maintained by the Minnesota Department of Transportation and the Metropolitan Council. The software package was developed by the Federal Highway Administration and is stored on the state mainframe computer.

The model uses socio-economic data to project future year traffic and assigns the volumes to a roadway network of the seven county region. Factors such as population, households, employment and land use (based on 1970 and 1980 census data) are used in conjunction with the 1982 Travel Behavior Inventory to determine the generation and distribution of trips in the region.

After data is prepared at the regional level, it is allocated to smaller geographical units called Traffic Analysis Zones (TAZ's). The projected year trips are assigned to the roadway network by the minimum time travel path from each origin TAZ to each destination TAZ. The sum of trips on a link resulting from all minimum time travel paths is the assigned volume on the link.

Link volumes represent future year Average Weekday Traffic (AWDT) volumes which are acceptable for regional planning. However, these volumes are further refined manually and by microcomputer to produce more accurate project level forecasts. Subdividing the TAZ's into smaller geographical units, adding a higher level of detail to the network, assigning multiple travel paths, acquiring the most recent traffic data, consulting previous Traffic Analysis Reports and analyzing traffic movements in greater detail are all possible components of this refinement process.

The following data and procedures were used for this forecast:

1) Year 2000 AWDT, Peak Hour and HCAWDT traffic assigned to the F2000 road network.

   Year 2000 projected volumes from our regional travel model were used as a basis for the forecasts in this report where possible, however, several of the crossroads to CSAH 1 are not included in the computer network.

2) Current and historical Average Daily Traffic (ADT) and peak hour traffic counts from the Mn/DOT Data Collection Unit and Hennepin County and turning movement volumes taken by the Mn/DOT Traffic Forecasts Unit and Hennepin County.

   Historic trend analyses of traffic counts are used as a guideline in projecting future traffic volumes.

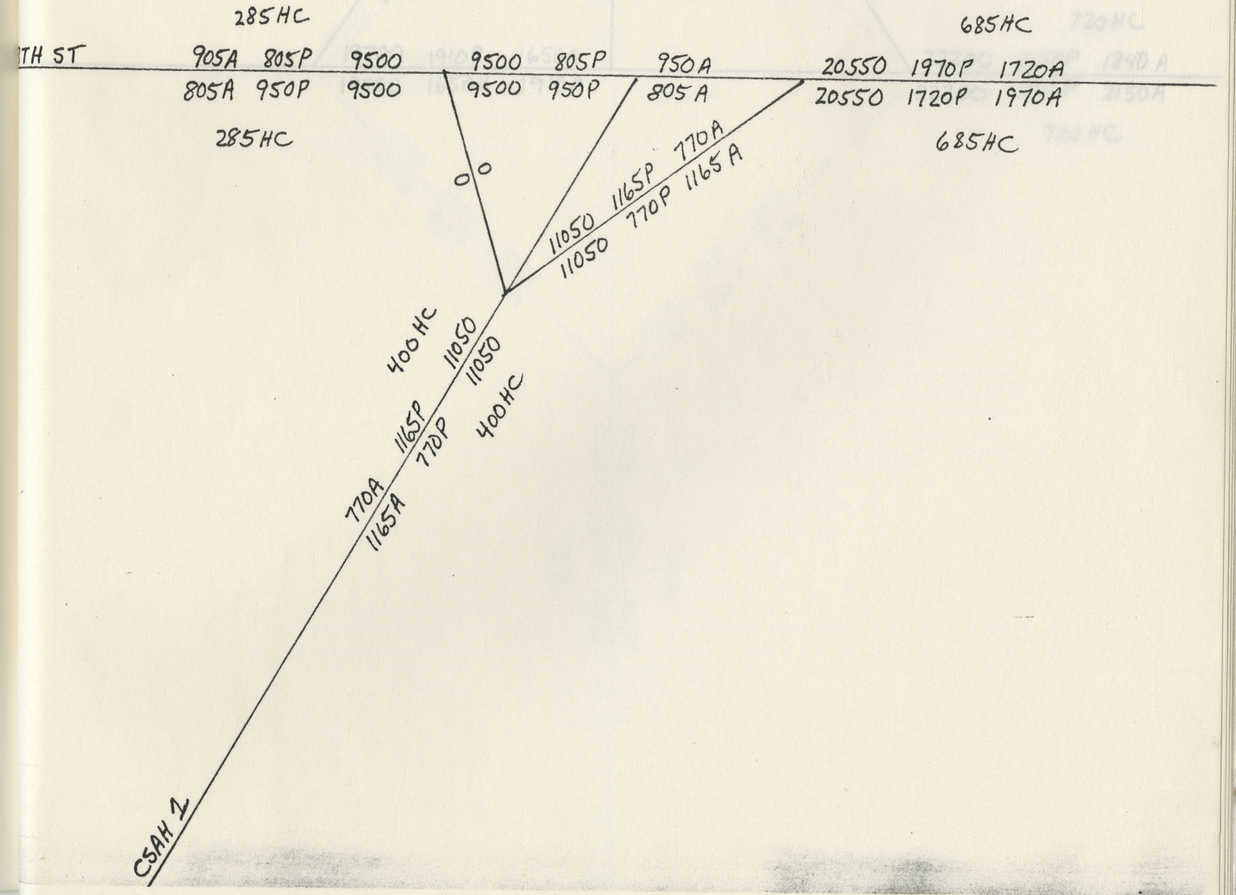
An extensive study of TH 35W alternates which is currently underway will, upon completion, provide the most accurate future year traffic projections for TH 35W. Therefore, the volumes in this report on TH 35W are subject to change. If you have any questions, please contact Caren Grantz-Miller at 297-1466.

Sincerely,

Allan E. Pint

Allan E. Pint
State Traffic Forecasts Engineer

Attachment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905A 805P 9500
805A 950P 9500
285HC
9500 805P 950A
9500 950P 805A
685HC
20550 1970P 1720A
20550 1720P 1970A
685HC
0
0
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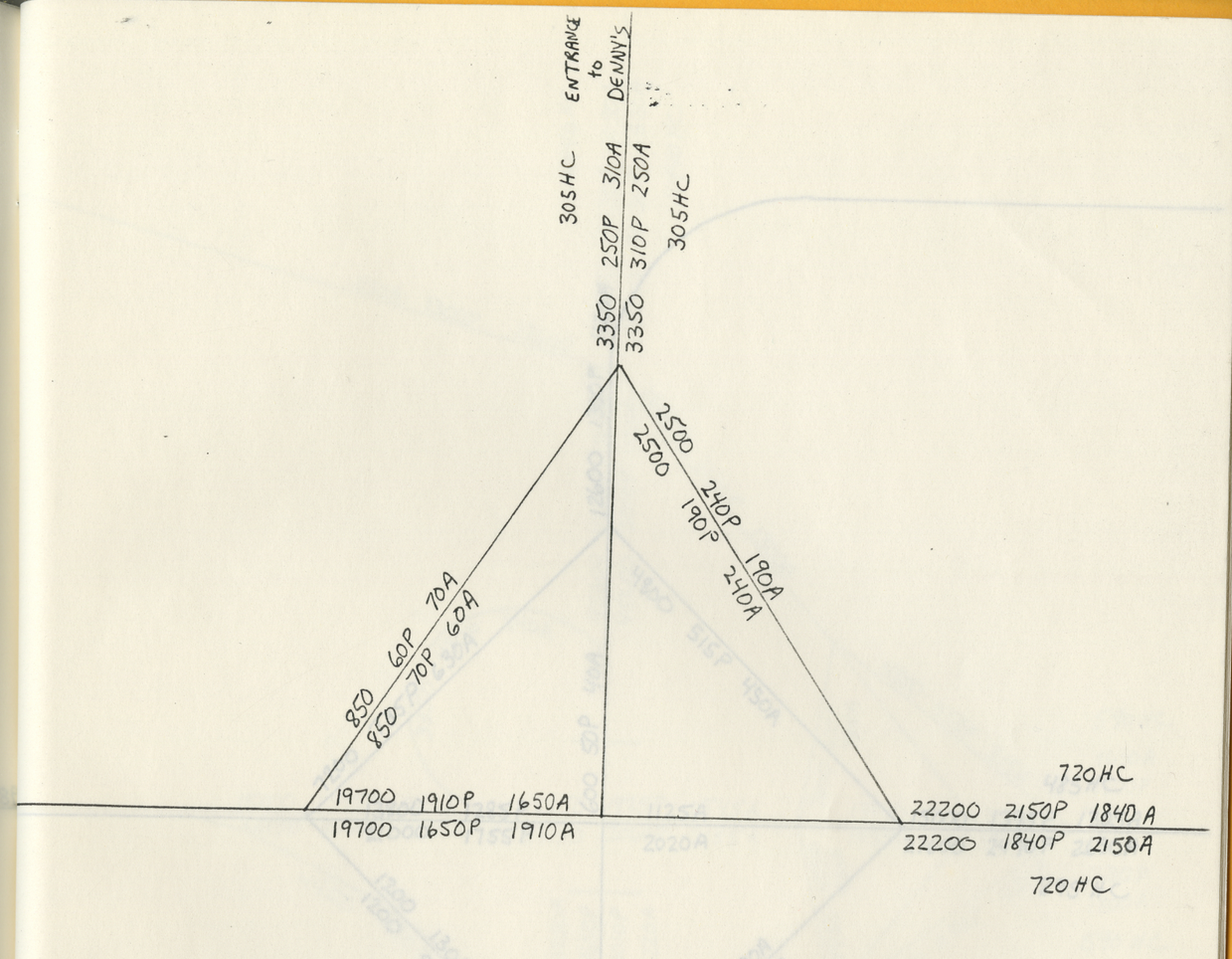
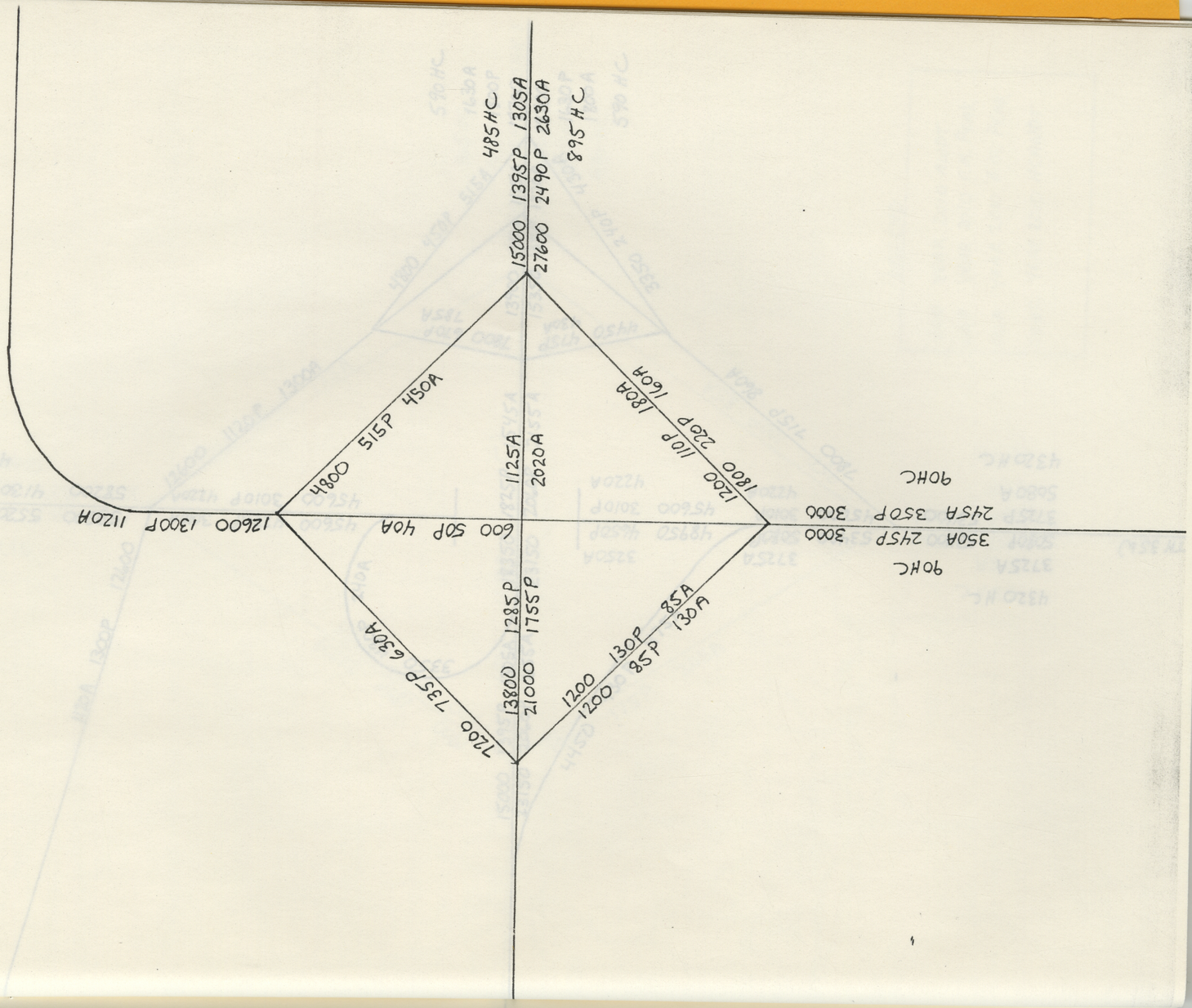
11050 770P 1165A
400HC
770A 1165P 11050
1165A 770P 11050
400HC
CSAH 1


ENTRANCE to DENNY'S
305HC
250P 310A
310P 250A
305HC
3350
3350
2500
2500
240P 190A
190P 240A
850
850
60P 70A
70P 60A
720HC
19700 1910P 1650A
19700 1650P 1910A
22200 2150P 1840A
22200 1840P 2150A
720HC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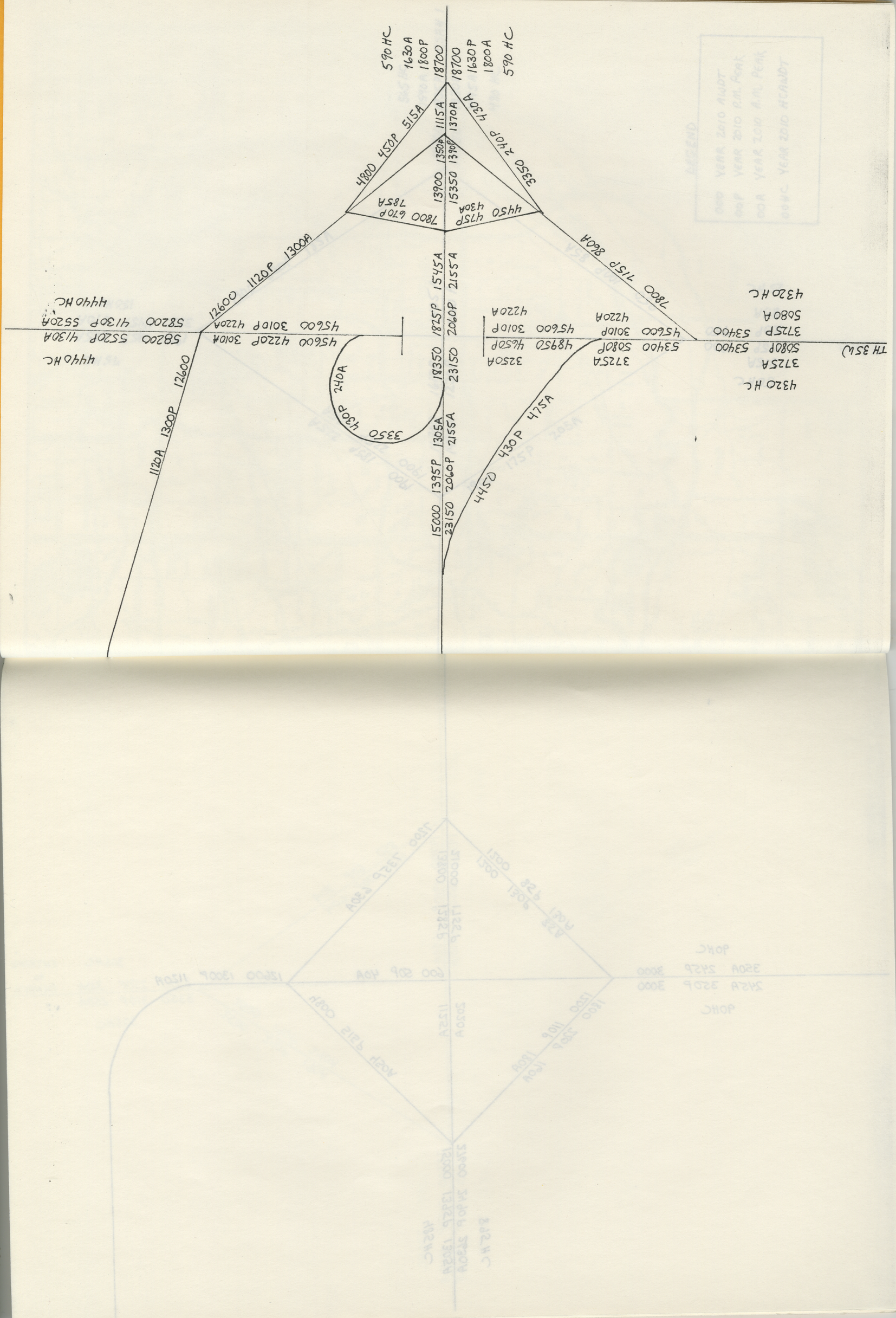
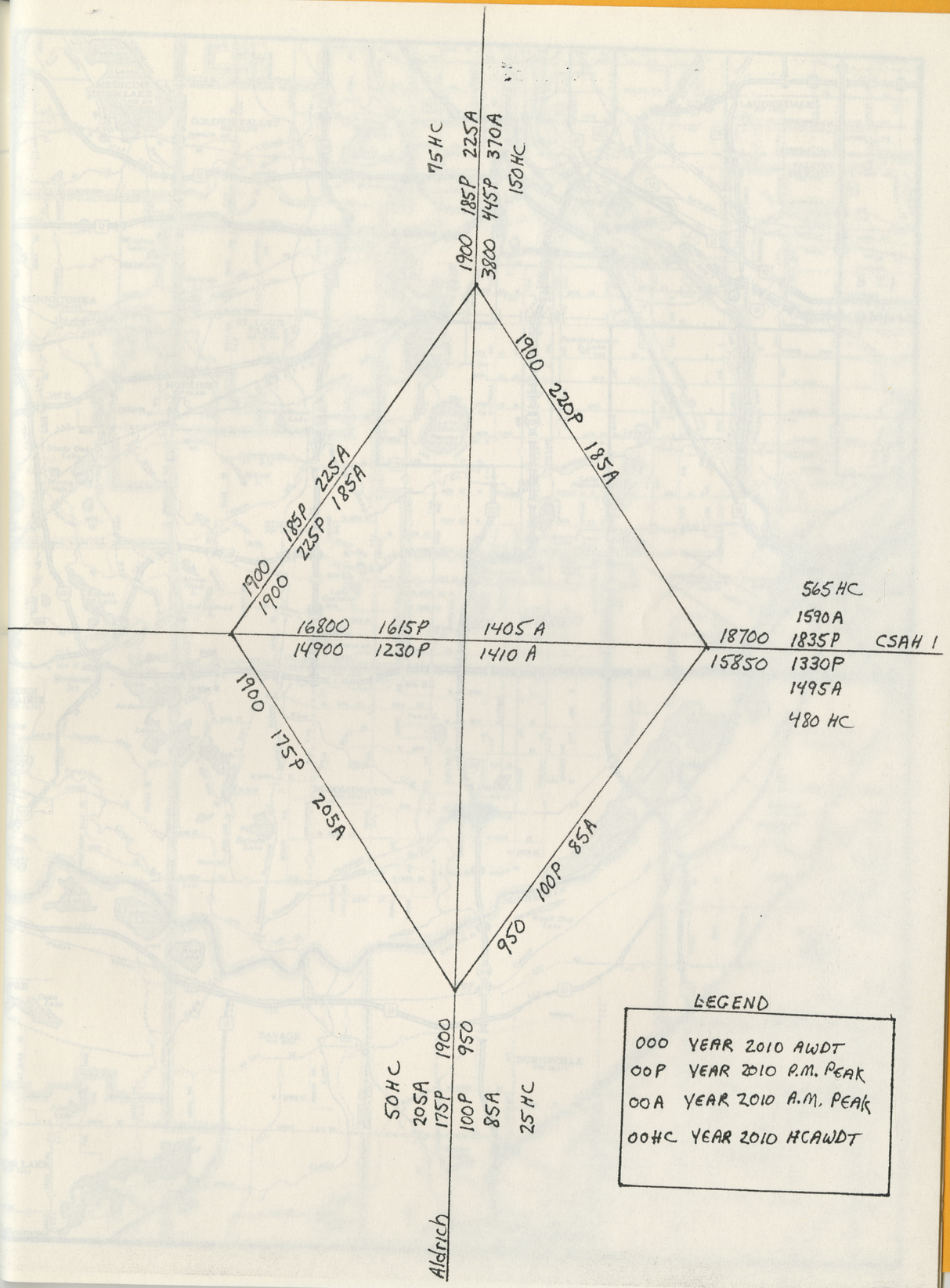
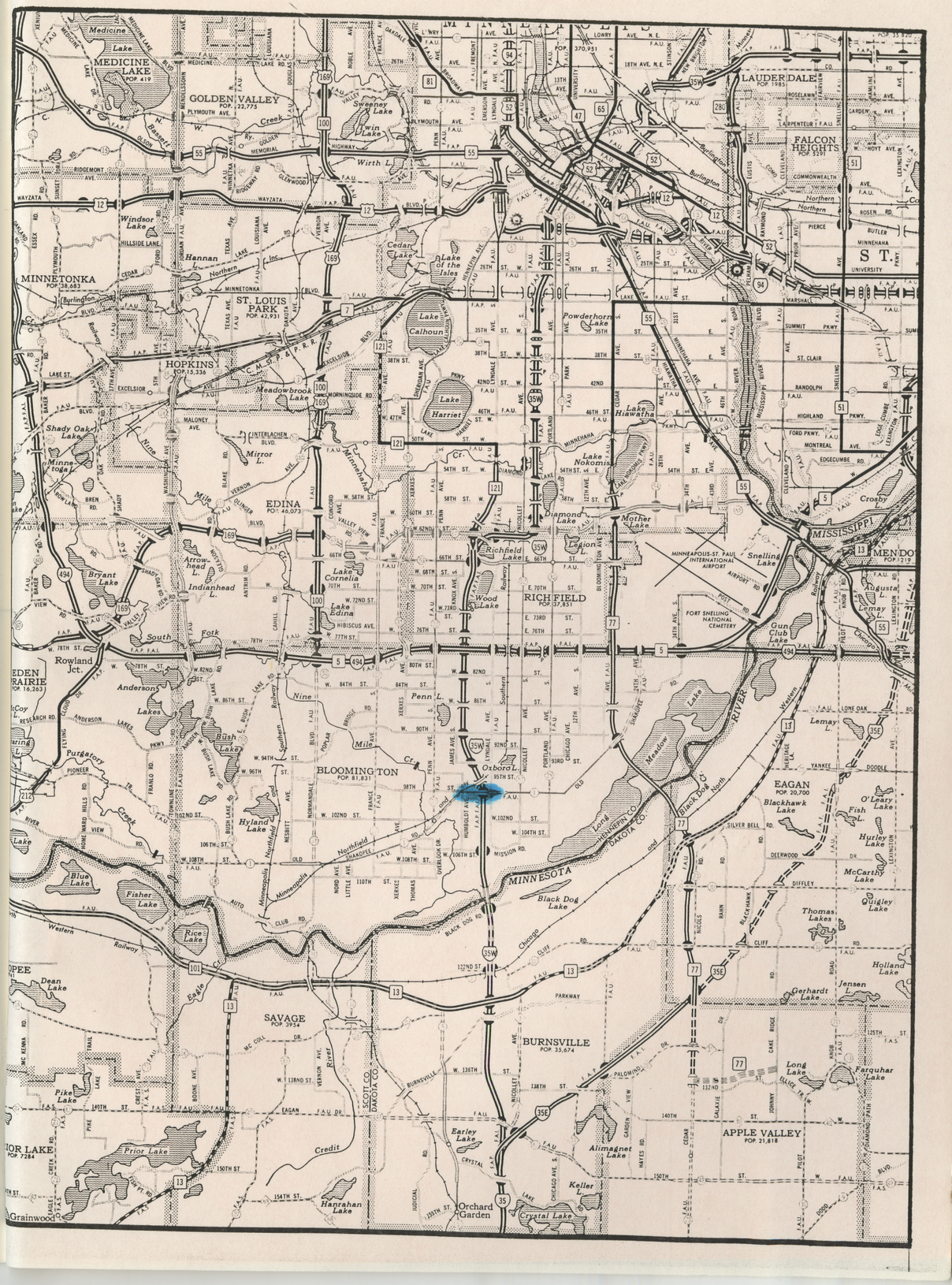
15000 1395P 1305A
27600 2490P 2630A
895HC
4800 515P 450A
1125A
2020A
1200 110P 180A
1800 220P 160A
90HC
600 50P 40A
12600 1300P 1120A
90HC
350A 245P 3000
245A 350P 3000
1200 85P 130A
1200 130P 85A
13800 1285P
21000 1755P
720 735P 630A


590 HC
1630A
1800P
18700
18700
1630P
1800A
590 HC
4800 450P 515A
1115A 1370A 430A
2400P
3350
1350P 1390P
13900 15350
7800 670P 785A
4450 475P 430A
7800 715P 860A
12600 1120P 1300A
1545A 2155A
1825P 2060P
18350 23150
1305A 2155A
1395P 2060P
15000 23150
3350 430P 240A
4450 430P 475A
1120A 1300P 12600
5820O 5520P 4130A
4440 HC
5820O 4130P 5520A
4440 HC
4560O 3010P 4220A
4560O 4220P 3010A
4560O 3010P 4220A
4895O 4650P
3250A
3725A
5340O 5080P
4560O 3010P 4220A
3725P 5340O
5080A
4320 HC
3725A
5080P 5340O
TH 35W
4320 HC


75 HC
1900 185P 225A
3800 445P 370A
150 HC
1900 220P 185A
1900 185P 225A
1900 225P 185A
1900 175P 205A
950 100P 85A
50 HC
205A
175P
1900
100P
950
85A
25 HC
Aldrich
565 HC
1590A
16800 16615P 1405A
14900 1230P 1410A
18700 1835P
15850 1330P
1495A
480 HC
CSAH 1
LEGEND
000 YEAR 2010 AWDT
00P YEAR 2010 P.M. PEAK
00A YEAR 2010 A.M. PEAK
00HC YEAR 2010 HCAWDT



MEDICINE LAKE POP. 419
GOLDEN VALLEY POP. 22,775
LAUDERDALE POP. 1985
FALCON HEIGHTS POP. 5291
MINNETONKA POP. 38,683
ST. LOUIS PARK POP. 42,931
HOPKINS POP. 15,336
EDINA POP. 46,073
RICHFIELD POP. 37,851
BLOOMINGTON POP. 81,831
EDEN PRAIRIE POP. 16,263
EAGAN POP. 20,700
SAVAGE POP. 3954
BURNSVILLE POP. 35,674
APPLE VALLEY POP. 21,818
PRIOR LAKE POP. 7284
MENDOTA POP. 1219
ST.
MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT
FORT SNELLING NATIONAL CEMETERY
MISSISSIPPI
MINNESOTA RIVER
Lake Calhoun
Lake Harriet
Lake of the Isles
Cedar Lake
Lake Nokomis
Lake Hiawatha
Diamond Lake
Wood Lake
Bush Lake
Hyland Lake
Black Dog Lake
Rice Lake
Fisher Lake
Blue Lake
Dean Lake
Prior Lake
Crystal Lake
Orchard Garden
Rowland Jct.
HENNEPIN CO.
DAKOTA CO.
SCOTT CO.
494
35W
35E
169
100
12
55
77
13
5
7